Amendments to the Claims:

In addition to the claim amendments requested in the Preliminary Amendment (submitted herewith), please amend the claims and add new claims, as shown in the following listing of claims, which will replace all prior versions and listings of claims in the application:

Listing of claims:

1. A substrate for lysing cells and purifying nucleic acid consisting of a matrix, a coating, and an integrity maintenance means for maintaining the nucleic acid.

2. The substrate according to claim 1, wherein said coating is impregnated into the matrix.

3. The substrate according to claim 1, wherein said coating is coated on the matrix.

4. A substrate for lysing cells and purifying nucleic acid consisting of a matrix, a coating and an indicator means for indicating the presence of nucleic acid.

5. The substrate according to claim 4, wherein said indicator means is selected from the group consisting essentially of a fluorescent indicator, color indicator or photometric indicator.

6. The substrate according to claim 4, wherein said substrate is in a shape selected from the group consisting essentially of a swab, a sheet, a card, and a ball.

7. The substrate according to claim 6, wherein said substrate further includes an integrity maintenance means.

8. The substrate according to claim 7, wherein when said substrate is a sheet, said integrity maintenance means is a plastic bag.

9 (Amended). A method of purifying nucleic acid comprising the steps of:

a. providing a dry substrate comprising:

i. a solid matrix, wherein the solid matrix comprises nitrocellulose or nylon; and

ii. a coating, wherein the coating comprises an anionic surfactant or detergent which facilitates cellular lysis;

b. applying to the substrate a sample comprising nucleic acid;

c. capturing the nucleic acid with the substrate;

d. optionally, fixing the nucleic acid to the substrate;

e. treating the nucleic acid, which is maintained on the substrate, with an external substance which generates a signal in an assay; and

f. generating a signal to indicate the presence of the nucleic acid, which is maintained on the substrate.

[applying a nucleic acid sample to a substrate consisting of an coating for enabling cellular lysis and immobilizing the released genetic material fixed to a matrix, the substrate physically capturing the nucleic acid, bonding the nucleic acid to the substrate, and generating a signal when the nucleic acid bonds to the substrate.]

10 (Amended). The method according to claim ~~6~~ 9, wherein the signal of generating step f comprises [said generating step is further defined as generating] a fluorescent signal, color indicator or photometric indicator.

11 (Amended). The method[s] according to claim ~~6~~ 9, further comprising:

g. [including the step of] analyzing the amount of nucleic acid captured and maintained on the substrate by quantifying the generated signal.

12. A kit for purifying nucleic acid comprising:
a coated matrix and an integrity maintenance means for preserving the matrix and purifying nucleic acid.

13 (Amended). The kit according to claim ~~9~~ 12, wherein said coated matrix is in a shape selected from the group consisting essentially of a swab, a sheet, a card, and a ball.

14 (Amended). The kit according to claim ~~9~~ 12, wherein said coated matrix is in a shape selected from the group consisting essentially of a plastic bag, cellophane, a sealable container, cartridge and parafilm.

15. A substrate for labeling blood transfusion bags consisting of a matrix, a coating and an integrity maintenance means.

16. A blood card for labeling blood transfusion bags comprising a matrix, a coating and an integrity maintenance means.

17 (Amended). ~~A~~ The blood card according to claim 16, wherein said card further includes an indicator means for indicating the presence of nucleic acid.

18 (Amended). The method according to claim 9, wherein in [said] generating step f, the signal is generated [is further defined as generating a signal] with an of amount cells at a concentration of at least ~~as low as~~ 0.33 cell/μl.

19 (New). The method according to claim 9, wherein the coating of step a further comprises:

a. a weak base;

b. a chelating agent; and

c. optionally, uric acid or a urate salt.

20 (New). The method according to claim 19, wherein the weak base comprises Tris, the chelating agent comprises ethylenediaminetetracetic acid (EDTA), and the anionic surfactant or detergent comprises sodium dodecyl sulfate (SDS).

21 (New). The method according to claim 9, wherein the nucleic acid comprises DNA.

22 (New). The method according to claim 9, wherein the external substance of step e comprises an antibody.

23 (New). The method according to claim 9, wherein the nucleic acid comprises human DNA and the external substance of step e comprises an antibody which recognizes human DNA.

24 (New). The method according to claim 9, wherein the sample of step b comprises blood or a blood product, semen, sweat, saliva, urine, water, stool, sputum, cell culture, or cell lysate.

25 (New). A method of purifying and analyzing DNA in a blood sample, wherein the method comprises the steps of:

a. providing a dry substrate comprising:

i. a solid matrix, wherein the solid matrix comprises nitrocellulose or nylon; and

ii. a coating, wherein the coating comprises an anionic surfactant or detergent which facilitates cellular lysis;

b. applying to the substrate a blood sample comprising DNA;

c. capturing the DNA with the substrate;

d. optionally, fixing the DNA to the substrate;

e. treating the DNA which is maintained on the substrate with an external substance which generates a signal in an assay;

f. generating a signal to indicate the presence of DNA captured and maintained on the substrate; and

g. analyzing the amount of DNA captured and maintained on the substrate by quantifying the generated signal.

26 (New). The method according to claim 25, wherein the blood sample comprises blood or a blood product.

27 (New). The method according to claim 25, wherein the signal of generating step f comprises a fluorescent signal, color indicator or photometric indicator.

28 (New). The method according to claim 25, wherein in generating step f, the signal is generated with an amount of cells at a concentration of at least 0.33 cells/μl.

29 (New). The method according to claim 25, wherein the coating of step a further comprises:

a. a weak base;

b. a chelating agent; and

c. optionally, uric acid or a urate salt.

30 (New). The method according to claim 29, wherein the weak bases comprises Tris, the chelating agent comprises ethylenediamine tetracetic acid (EDTA), and the anionic detergent or surfactant comprises sodium dodecyl sulfate (SDS).

31 (New). The method according to claim 25, wherein the external substance of step e comprises an antibody.

32 (New). The method according to claim 25, wherein the DNA comprises human DNA and the external substance of step e comprises an antibody which recognizes human DNA.